Claims

We claim:

1. A method of managing the state of networked computers, comprising:

specifying a preferred state;

defining selected networked computers to be maintained in the preferred state;

monitoring the selected networked computers for deviation from the preferred state; and

bringing the selected networked computers that deviate from the preferred state to the preferred state via a mobile software agent that travels autonomously between the selected networked computers.

2. The method of claim 1, wherein specifying a preferred state comprises:

defining a preferred software configuration of a computer; and

defining actions needed to bring the computer to the desired software configuration if the computer is not in the preferred software configuration.

3. The method of claim 1, wherein defining selected computers to be maintained in the preferred state comprises generating a list of networked computers to be maintained in the preferred state.

4. The method of claim 3, wherein the mobile software agent autonomously travels between the selected networked computers by traveling to the computers on the list of networked computers to be maintained in the preferred state.

5. The method of claim 1, wherein defining selected computers to be maintained in the preferred state comprises defining a network space of computers to be maintained in the preferred state.

6. The method of claim 5, wherein the mobile software agent autonomously travels between the selected networked computers by traveling to the computers in the

networked space of computers to be maintained in the preferred state.

7. The method of claim 1, wherein monitoring the selected networked computers for deviation from a preferred state is performed via a mobile monitoring agent.

8. The method of claim 7, wherein the mobile agent travels autonomously between the selected networked computers.

9. The method of claim 1, wherein the mobile software agent that brings the selected networked computers that deviate from the preferred state to the preferred state also performs the monitoring the selected networked computers for deviation from the preferred state by first monitoring each selected networked computer it travels to for deviation from the preferred state and subsequently bringing the computer to the preferred state if it deviates from the preferred state.

10. The method of claim 1, wherein the mobile software agent travels autonomously between the selected networked computers by transferring itself from a present computer to a next computer, and erasing itself from the present computer after it has successfully transferred itself to the next computer.

11. The method of claim 1, further comprising providing a trip report from the mobile software agent to a host system.

12. The method of claim 1, wherein the mobile software agent is further operable to travel to computers not among the selected networked computers to transfer data.

13. The method of claim 12, wherein the mobile software agent maintains the trip report that is reported to a host computer upon return of the mobile software agent to the host computer.

14. The method of claim 12, wherein the mobile software agent sends a trip report to the host computer periodically as it travels between the selected networked computers.

15. The method of claim 1, wherein the selected networked computers have a mobile software agent host program thereon to facilitate mobile software agent travel and execution.

16. A machine-readable medium with instructions stored thereon, the instructions operable when executed to cause a computer to:

receive and store data defining a preferred state of computers;

receive and store data defining selected networked computers to be maintained in the preferred state;

generate a mobile software agent that travels autonomously between the selected networked computers and brings the selected networked computers that deviate from the preferred state to the preferred state.

17. A machine-readable medium with instructions stored thereon, the instructions operable when executed to cause a computer to:

generate a mobile software agent that travels autonomously between selected networked computers that deviate from a preferred state to the preferred state.

18. A machine-readable medium with instructions stored thereon, the instructions operable when executed to cause a computer to:

monitor a first networked computer for deviation from a preferred state;

bring the first networked computer to the preferred state if it deviates from the preferred state; and

copy the executable instructions operable to perform the monitoring, bringing to a preferred state, and copying functions to a second networked computer.

19. The machine-readable medium of claim 18, with further instructions operable when executed to cause a computer to remove the executable instructions operable to perform the monitoring, bringing to a preferred state and copying functions from the first networked computer after the instructions are successfully copied to the second networked computer.

20. A computerized networked computer management system, comprising:

a networked computer server, operable to generate a mobile software agent that travels autonomously between networked computers, monitors the networked computers for deviation from a preferred state, and brings the selected computers that deviate from the preferred state to the preferred state.

21. A method of managing the state of networked computers, comprising:

specifying a preferred state;

defining selected networked computers to be maintained in the preferred state;

monitoring the selected networked computers for deviation from the preferred state; and

bringing the selected networked computers that deviate from the preferred state to the preferred state via a mobile software agent that is sent to the selected networked computers.